Cracklin' Static

February 2022 Edition

1968 50th Anniversary 2018
SIERRA NEVADA
Amateur Radio Society

Zoom Virtual Meeting Sat Feb 5, 8 AM

See pg 4....

SNARS NET on DMR – Tuesdays 8pm
DMR Talk Group: 31328 SNARS

SNARS Treasury Closing Balances
As of 1/29/2022

Account	
Operating	**$9,841**
Savings	**$7,864**
Self Insurance	**$13,700**
PayPal	**$1,467**
Convention	**$4,212**
Total	**$37,084**
Net Monthly	**-$10,155**
Net YTD	**-$10,155**

SNARS Membership as of 1-30-22

Extra	154	33%
General	126	27%
Technician	164	35%
Advanced	15	3%
No License	8	2%
Total	**467**	

SNARS ARRL Members

Regular	265	57%
Life	42	9%

PRESIDENT'S VOICE

President John Miller, N7JDM

Email: jmil912@gmail.com

Well, it's February already. I hope you are all happy and healthy. The weather is nice, although more moisture would be good. We're still searching for a location to host our sorely missed in-person meetings. There are a couple of leads we are investigating and hopefully one of these will come through for us. Mostly the issue is cost, everyone wants our business but the costs are hard to swallow, no pun intended.

We have in our possession four brand new repeaters, two UHF and two VHF. They are awaiting the go-ahead for programming and the two UHF link repeaters can be installed. Those will go to Virginia Peak and Toulon. One VHF repeater is slated for Peavine, the other for Virginia Peak. The snow levels will dictate when the work can be completed.

We have a swap meet tentatively scheduled for May 21st pending approval of Cabela's to use their parking lot as before. More details to follow.

That's all for now, happy hammin!

73, John N7JDM

1968 50th Anniversary 2018

SIERRA NEVADA Amateur Radio Society

PO BOX 7727 Reno NV 89510
Yearly Dues: $40.00 Individual ● $50.00 Family
775.453.4142 http://snars.org

2022 Officers

President.....John Miller N7JDM
Vice-President.....John Byerly, N7ROJ
Treasurer.....Bill Jones, AE7OX
Secretary.....Anthony Marcin, W7XM
Director .....Wes Vick, KG7QXE
Director .....Jim Shepherd, W6US
Director .....Barry Bettman, K6ST

2022 Staff

Cracklin Static .....Howie Holden, WB2AWQ
W7TA Trustee .....Peter DeBay, KE7VSR
KR7ENO Trustee.....Howie Holden, WB2AWQ
Control Operator .....Pat Sheehan, W7DED
Youth Involvement.....Barry Bettman K6ST
NVQSO Coordinator.....Jim Shepherd, W6US
Historian .....Jon Fox, KF7KTC
Tech Team Lead .....Pat Sheehan, W7DED
Membership .....Kim Farnham, KG7TMA
PIO .....Greg Krantz, NT7Q
VE Coordinator.....Krystal Rhoades, AJ6GC
Meeting Greeter .....Bill Jones, AE7OX
Noon Net Manager .....Wes Vick, KG7QXE
DMR Net Manager .....Anthony Marcin, W7XM
Reno Ham Swap .....Wes Vick, KG7QXE
Webmaster .....Erik Andreasen, K6CZH
Club Sales Manager.....Julie Dodge, N7JWL
Recording Secretary.....Doug Edmondo, W7DBE

Cracklin Static Publication

Editor: Howie Holden **WB2AWQ** - holden7471@msn.com
Cracklin' Static is the Newsletter of, and sponsored by the Sierra Nevada Amateur Radio Society. Cracklin' Static is published the week before meetings. Opinions expressed herein are those of the editors and contributors and should not be considered as official expressions of the Club Officers, Staff or Club Members, or as endorsements by same.

Material for publication may be edited to enhance readability or to save space. We reserve the right to use whatever font size, line spacing or other tools as may be required to publish this Newsletter. **Deadline for input to the newsletter is 1500 hours on the Sunday** prior to the 1st Saturday (or whichever Saturday is the meeting) of each month.

SNARS Wide Area Linked System

147.030 + Pl 123.0	Sparks, Fernley, Fallon	
147.210 + PL 100.0	Reno, Sparks	
147.150 + PL 123.0	Lake Tahoe, Truckee, Carson	
146.925 –PL 123.0	Lovelock, Fallon	
146.670 –PL 123.0	Winnemucca	
444.875 + PL 100.0	Yerington	
444.125 + PL 123.0	Reno Sparks	

DMR Systems

444.925 + CC 1	Reno, Sparks	
444.825 + CC 1	Dayton, Fallon, Carson	
443.925 + CC 1	Lake Tahoe, Truckee, Carson	
443.950 + CC 1	Incline Village	
442.875 + CC 1	Sparks, Fernley, Fallon	
442.850 + CC 1	Downtown Reno	
441.950 + CC 1	Fallon, Fernley	

Fusion Systems

146.610 – PL 123.0	Reno, Carson, Dayton	

IRLP / EchoLink Systems

147.300 + PL 123.0	Reno, Sparks	

Packet / APRS

145.050 - RNO	Reno, Carson, Dayton	
145.050 - ROSE	Lake Tahoe, Truckee. Carson	
144.390 - TOULON	Lovelock, Fallon	

Standalone Systems

147.390 + PL 100.0	Reno, Carson, Dayton	
443.075 + PL 123.0	Reno, Carson, Dayton	
927.0875 + PL 114.8	Reno, Carson, Dayton	

Online Offline Not Linked

Noon Net
Sierra Nevada Amateur Radio Society

Weekday on the SNARS Linked System

147.030 + PL 123 – Sparks/Fernley
147.150 + PL123.0 – Lake Tahoe / Truckee
147.210 + PL 100.0 - Reno
444.875 + PL 100.0 - Yerington
146.925 - 123.0 – Lovelock / Fallon
146.67 – PL 123.0 - Winnemucca

Monday through Friday @ 12:00pm

Open to all amateur radio operators. A general informational net for the amateur radio community of Northern Nevada and Eastern California. Radio Checks and Questions are welcomed.

Nets on the SNARS Linked Systems

147.210 + 100.0 | 147.030 + 123.0 | 147.150 + 123.0
147.670 – 123.0 | 146.925 – 123.0 | 444.875 + 100.0

ERC Net for NV and Northern CA	Monday @ 9:15pm
N. Western NV ARES Net	Thursday at 7:30pm
Northern Nevada Preppers Net	Wednesday @ 8:00PM
Hospital Net	Friday @ 10:00AM

Nets on IRLP (GSR) System

Repeater: 147.300 + 123.0

Amateur Radio Newsline	Monday - 8:00PM
Nevada Skywarn Net	Wednesday - 7:00pm

Nets on Simplex/HF

Jefferson Noon Net	7.204 LSB	Daily - 12:00pm
6 Meter Net	50.350 USB	Tuesday – 8:00pm
2 Meter Weak Signal	144.250 USB	Wednesday - 8:00PM
2 Meter Simplex Net	146.500 FM	Thursday – 8:00PM
10 Meter Net	28.350 USB	Sunday – 2:00PM

DMR
DIGITAL MOBILE RADIO

SNARS Weekly DMR Net – Tuesdays 8:00PM

SNARS Talk Group 31328

Open to Members and Guests. A general information net each week on DMR.

SNARS CALENDAR

SNARS Board Meeting Wednesday, Feb 9, 6:00PM. Loc tion and mode Chin Chin, Sparks, and Zoom

Reno QRP Group Meeting Tue, February 15, 2022, 11am – 12pm Jack's Coffee Shop #2, 605 N Wells Ave, Reno, NV Contact Ed, WD7Y WD7Y@sbcglobal.net for more info. If cancellation is needed, will be announced on the SNARS noon net.

One Day Ham-Cram and exam Saturday, February 19, 8 AM Sharp! MUST preregister! See: https://snars.org/oneday/ REOC, 5190 Spectrum Blvd, Reno NV

HAM RADIO NIGHT on Zoom 7:00 PM , February 21 see https://snars.org/hamradionight/

Next months SNARS Breakfast Meeting 8 AM March 5, 2022. Location and media mode tentative depending on Board decision and local restrictions.

WELCOME NEW MEMBERS

As Of 1-30-22

James	**Snell**	**K6KQI**
William	**Gustafson**	**KF7LPG**
Robert	**Grover**	**KJ4FOJ**
Mark	**Mitzen**	**KI7FNY**
Garrett	**Olson**	**KK7COH**
Phil	**Caterino**	**KJ7SP**
Sean	**Freeman**	**KK7COO**
Eugene	**Lawney**	**SWL**

SNARS Virtual Monthly Meeting

SNARS (virtual on zoom conferencing) Monthly Meeting on

Saturday 2-5-22 8:00AM PST

Presentation:

" RF Cable Principles" with Chuck Abramson - K9CFA

This Presentation gives the audience the ability to recognize RF cable core concepts. Concepts included in this presentation are: understanding coaxial cable construction, coax construction materials, impedance, loss characteristics, SWR, phase matching, and system design and application. At the end the presentation an individual will have an understanding of how to decide which coaxial cable is the best product for their application based on knowing frequency range, length, and power rating.

This topic is focused on amateur radio.

Chuck Abramson - K9CFA

Chuck is the technical partner at ABR Industries. I've been in the wire and cable industry for 31 year for wireless, control systems, HDTV, and industrial markets.

ABR Industries is a 2nd Generation company. ABR is focused on RF / Microwave cable products focused on Amateur, 3G/4G/5G, Broadcasting, RFID, WiFi, and other wireless markets. We sell directly and through dealers in the different markets. We also manufacture cables and assemblies in the US. The main office is in Houston Texas where we have 15 employees.

TO REGISTER, go to:

https://us06web.zoom.us/meeting/register/tZclceioqTovG9HUnnmrHZgQatjnHtbfPIu-

Any questions, email Barry k6st@arrl.net

THE NAME OF THE GAME

Jim Shepherd, W6US nvjims@gmail.com

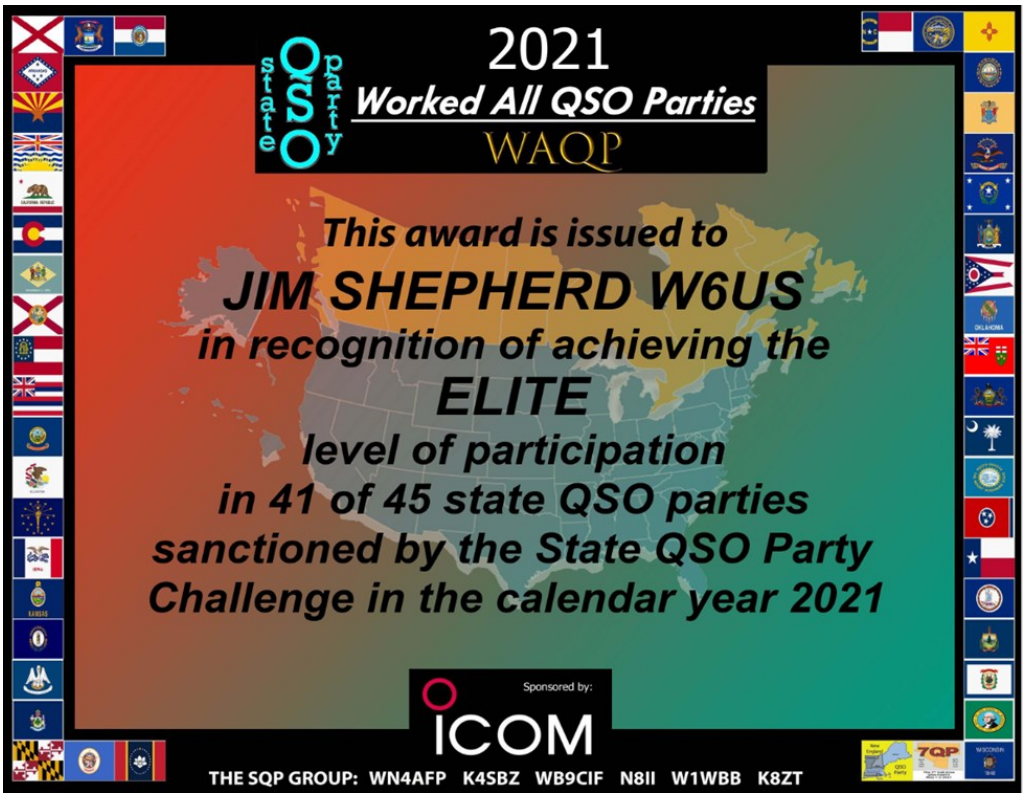
STATE QSO PARTIES

February 5th marks the start of the State QSO Parties for this year. Vermont, Minnesota, and British Columbia are all holding their parties on this weekend. This is a good opportunity to make contacts with these locations.

There are 46 contests between now and the end of October with 3 of them being relatively local for us. Everyone should take part in at least these 3 events.

The 7th Area QSO party for all the states in the '7' callsign area is one of the biggest in the country, and those of us operating in the area can work anyone else in the world for big scores. It is traditionally the first Saturday in May. Counties in Nevada, especially the rarer ones, are highly wanted, and this gives us the experience in handling a pile up on the bands.

The second big contest occurs on the first weekend in October and is the California QSO Party. For us in Nevada, we would try to catch all of the 58 counties in California, or we can take an expedition to the west and operate from one of the counties and work the world.



Of course, the biggest contest of the year for us is the Nevada QSO Party on the 2nd weekend of October. Last year we had about a hundred Nevada stations show up in the submitted logs but only about a third of them sent in logs. Everyone who has a license can participate as we allow repeater contacts which are a good way for beginners to get started. Expeditions and rovers to the rural areas are very competitive and a lot of fun especially if they are on county lines where they can make multiple QSOs with each contact.

The State QSO Challenge is a yearlong contest that takes your contacts from all of the contests and then multiplies that by the number of state contests where you made 2 or more contacts. To enter this contest, all you have to do is to upload your information to 3830Scores after each state contest and then send you log to the individual contest sponsors. Be sure to list our club as "Sierra Nevada ARS" as there is a club competition. Last year SNARS was 37th out of 244 clubs on the number of entries with only 3 of us participating… if a few more hams in SNARS had participated, we could have easily ended up in the top 20. For more information, go to http://stateqsoparty.com/

One of the fun things about most of the QSO parties is that you have a real chance of ending up with a "First Place" certificate in your class for Nevada. I got several of these from contests where I only had 2 or 3 contacts… You are almost always the only contact that they have in Nevada which is a much appreciated and wanted multiplier for them.

Virtually all of the different state contests have differences in their rules. This creates variety and is a good reason to read the rules. An excellent source for all the information is https://www.contestcalendar.com/stateparties.html which has all the dates and links to their websites. Some use states as exchanges, some use ARRL/RAC sections, some use serial numbers and there was one last year that was using first names. There are a lot of weekends where there are multiple parties, and sometimes it is hard to tell which state they are located in. There are specific abbreviations that need to be used for the county names, and quite often they are not just the first 3 or 4 letters of the county, so don't be afraid to ask for the abbreviations phonetically… Most of the individual state websites have downloadable lists of the counties and their abbreviations which you can have handy to help with the logging of the contacts.

N1MM+ Logger is set up for all of the state QSO parties, and is a great help in getting the exchanges correct and sending a Cabrillo log out after the contest. It has a scoring window that will help you fill out the report on the 3830Scores website with the correct information. It is one of the best values for ham radio as it is totally free to download and use. It updates every Tuesday, and it only takes a minute or two to run the update. This will also add the necessary bonus points for specially designated stations in some of the contests as well as checking for the correct information in your exchange and giving you a running score.

State QSO parties are fun. They are not as high pressured as the big DX contests, and in fact there is a fair amount of Rag Chewing going on. It is a great way to expand your skills on the air. Furthermore, it keeps the bands active so we can show their use and prevent their loss. With 10 meters opening up regularly, technicians can get on the air and make a big difference!

MIKE'S MISSIVES CHAPTER SIXTY THREE

Mike Katz, N7MSK

FCC PART 97: §97.313 Transmitter power standards. (Partial)

(a) An amateur station must use the minimum transmitter power necessary to carry out the desired communications.

(b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

(c) No station may transmit with a transmitter power output exceeding 200 W PEP:

(1) On the 10.10-10.15 MHz segment;

(2) On the 3.525-3.60 MHz, 7.025-7.125 MHz, 21.025-21.20 MHz, and 28.0-28.5 MHz segment when the control operator is a Novice Class operator or a Technician Class operator; or

(3) The 7.050-7.075 MHz segment when the station is within ITU Regions 1 or 3.

(d) No station may transmit with a transmitter power exceeding 25 W PEP on the VHF 1.25 m band when the control operator is a Novice operator.

(e) No station may transmit with a transmitter power exceeding 5 W PEP on the UHF 23 cm band when the control operator is a Novice operator.

(To be continued next month)

SHORT TAKES **(By Jim Shepherd W6US)**

DX

There are some operations starting to pick up. Ivory Coast, Sint Maarten, Ogasawara, and Senegal are some of the featured DX operations this month. The ARRL CW DX contest is a good place to also look for DX that weekend. More information can be found at https://www.ng3k.com/Misc/adxo.html

Contest Calendar

The month starts out with the first 3 state QSO parties this weekend, see the article for more details. February 11-13 is the CQ RTTY WPX contest on all the HF bands. February 18-20 is the ARRL CW DX contest and a good time to add to your country list. North and South Carolina have their State QSO parties on the last weekend of the month. These and other contests information can be found at https://www.contestcalendar.com/contestcal.html

Third Monday ZOOM Ham Radio Night

We will have our popular Ham Radio Nights via ZOOM to get your questions answered. It will be held at 7pm on Monday, February 21. More information, including the link will be published before that date.

NAME THAT RIG?

(Answer on page 13)

THE COMSTOCK MEMORIAL STATION, INC.
A NEVADA 501C3 NOT FOR PROFIT CLUB
W7RN K7RC

A UNIQUE INVITATION FOR SNARS MEMBERS

Regardless of your license grade, there is a unique gamut of challenges and experiences in the world of HF Radio. The spectrum from 1.8 to 30 MHz will open a new world to you that is affordable and practical for most Hams. This series of hands-on interactive workshops is offered to those who have not yet experienced HF and for those who areinterested in learning the possibilities available on HF.

INTRODUCTION TO HF WORKSHOP
An overview of radios, antennas, propagation modes and on-the-air activities. Concentrations on topics requested by attendees. Opportunities to "get on the air" from the Comstock Memorial Station (*AKA* CMS) in Virginia City Highlands.

INTRODUCTION TO HF ANTENNAS WORKSHOP
All about antenna design, fabrication, and installation from a wire in the trees to Yagis and beyond. Concentrations on topics requested by attendees. Opportunities to "get on the air" From the Comstock Memorial Station.

INTRODUCTION TO HF EQUIPMENT WORKSHOP
An overview of radios, antennas, propagation modes and on-the-air activities. Concentrations on topics requested by attendees. Opportunities to "get on the air" from the Comstock Memorial Station.

INTRODUCTION TO DX, CONTESTING AND OTHER FUN ACTIVITIES
An overview of many of the activities available on-the air on HF. Concentrations on topics requested by attendees. Opportunities to "get on the air" from the Comstock Memorial Station in Virginia City Highlands.

Each Workshop is limited to 8 people. Face masks are required. Please wear Your SARS nametag. There is no particular time limit for each workshop.

THE CHARTER OF THE CMS is to advance the art of Radiosport, to train new operators and provide a venue for highly motivated hams to advance their operating skills. Since the Pandemic, most on-site activities are limited. W7RN maintains three remote hosts to allow challenged hams to access the station from the Internet. www.w7rn.com

See https://snars.org/intro-to-hf/ for more info, signup sheets

URGENT NEED FOR COMMENTS

United States Department of Agriculture, Forest Service is planning on assessing new fees on communication sites. These fees are based upon the costs associated with administration of the communications workload of the Reality Specialists, a program known as "cost recovery". These actions were authorized by the 2018 Farm Act.

They proposed an annual fee of $1400 per 'Communications Use Authorization". This is in addition to the statutory leasing charges that are currently paid by users. Our current lease payment is about $140 per site.

did do a small study of the ability to pay of the users, and most, being commercial entities like cellular companies, showed a minimal effect. However, amateur radio is a non-commercial activity, and in fact, we are statutorily prohibited from receiving pay for our communication services.

Amateur Radio provides free public communication services for public agencies around the country. In times of disasters, amateur radio operators can be deployed to areas where other services have failed. They can augment existing services, and this is recognized by FEMA under ESF2.

As Amateur Radio is a non-commercial activity, they should not be subject to charges like this cost recovery assessment. $1400 to a commercial cellular company is a minor expense, while to a small group of amateur operators with a communications system on a Forest mountaintop it may cause them to remove their use. This is especially true in the sparsely populated areas in and around the western forests, areas that are traditionally underserved with communications. There are a lot of areas that are served by amateur radio that have no cellular coverage, and this could affect public safety.

Comments are due by February 22, 2022. The full text of the proposed regulation can be found at **https://www.govinfo.gov/content/pkg/FR-2021-12-22/xml/FR-2021-12-22.xml#seqnum72540**

Comments are accepted by either direct entry on the eplanning website, Federal eRulemaking Portal: **http://www.regulations.gov**. Follow the instructions for sending comments.

can also be mailed to **Director, Lands & Realty Management Staff, 201 14th Street SW, Washington, DC 20250-1124.**

In either case, you will need to specify RIN 0596-AD44 so they will know which proposal you are addressing.

should address key points like our non-commercial nature, our support of public service, our contributions to public safety in remote areas, and our general service to disaster communications. Ask for exemption from this new fee.

will notice that we are not developing a 'sample' letter, but we are requesting that you write your own comments. Form letters, even in large quantities, are counted as one response… To use the eplanning website, it is best to write your comments in Word or a similar word processer, and then copy your comments to the proper place on the eplanning site. Be sure to check for correct spelling and grammar as these items add to the validity of your comments. A common mistake is calling the agency "Forestry Service" or "Forrest Service" when it is formally call "United States Department of Agriculture, Forest Service" or "USDA, Forest Service" but just "Forest Service" is fine.

items to mention are our Public Service uses, such as Skywarn, Hurricane response, aid to agencies such as Red Cross, involvement in search and rescue, and help with community events such as bike races, parades and fun runs. Hams have directly aided the Forest Service with communications during wildfire events. As we are all volunteers, stress the financial hardship a $1400 fee could cause. This may lead to the removal of repeater systems, especially in rural areas where the coverage is dearly needed due to the lack of cell coverage.

We need lots of comments to be sent to have any chance of getting an exemption from this fee. **Please send yours today!**

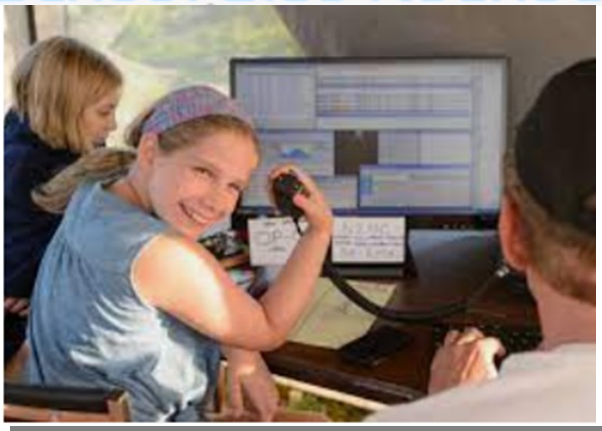
SNARS Board of Directors

YOUTH INVOLVEMENT

School Club Roundup

School Club Roundup is coming up February 14-18,, 2022. This 5-day event runs Monday through Friday from 1300 UTC Monday through 2359 UTC Friday. A station may operate no more than 6 hours in a 24-hour period, and a maximum of 24 hours of the

School Club Roundup is February ...



All entries will be issued an Award Certificate in PDF format. The School Club Roundup entry categories are:

- Elementary
- Middle/Intermediate/ Junior High School
- Senior High School
- College/University

Non-school clubs or multi-op groups and individuals are also eligible for a certificate. DX will be listed separately at the end of U.S. entries in each category.

ARRL School Club Roundup

Status:	**Active**
Geographic Focus:	Worldwide
Participation:	Worldwide
Mode:	CW, Phone, RTTY/Digital
Bands:	All, except 60, 30, 17, 12m
Classes:	Single Op (I) Non-School Club (C) School Club/Group (S)
Max operating hours:	24 hours total 6 hours out of any 24-hour period with off times of at least 10 minutes
Exchange:	RS(T) + Class (I/C/S) + (state/ province/country)
Work stations:	Once per mode
QSO Points:	1 point per phone QSO 2 points per CW/RTTY/digital QSO
Multipliers:	States + VE provinces + DXCC countries + (2x class C QSOs) + (5x class S QSOs)
Score Calculation:	Total score = total QSO points x total mults
Post log summary at:	http://contests.arrl.org/arrlscrscoresubmission.php
Mail logs to:	School Club Roundup c/o LIMARC PO Box 392 Levittown, NY 11756 USA
Find rules at:	http://www.arrl.org/school-club-roundup
Cabrillo name:	ARRL-SCR

More Info:
http://www.arrl.org/school-club-roundup

73,

Barry K6ST k6st@arrl.net
Nevada Section Youth Coordinator
ARRL (American Radio Relay League) www.arrl.org
The national association for amateur radio

CARRIER & AMATEUR RADIO CLUB NB6GC WITH GEOFF K6ERA PRESENTATION WAS HELD AT THE SNARS MONTHLY MEETING ON JANUARY 8, 2022

NB6GC USS Hornet Amateur Radio Club

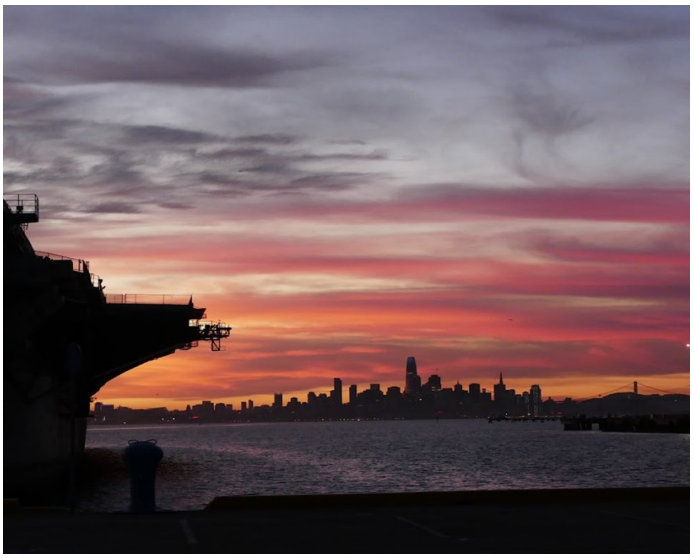
Landmark

Our Mission is to support and preserve the USS Hornet Museum Ship CVS-12 and its History through Amateur Radio Communications

Here's the video recordings to watch:

USS Hornet Amateur Radio Club presentation 1/8/2022
https://www.youtube.com/watch?v=0XdmYr8sBYI

Open Q&A Session January 8, 2022 (more on **USS** Hornet Amateur Radio Club)
https://www.youtube.com/watch?v=JKLrnpTogJE



Note: On behalf of the Sierra Nevada Amateur Radio Association, the board of directors approved and donated $250 to the USS Hornet Amateur Radio Club to help out with the antenna refurbish project. And the Hornet Amateur Radio Club NB6GC president send a big thank you and appreciation to SNARS

For more information about the USS Hornet Amateur Radio Club or to visit / operate the ham shack board, visit
https://www.facebook.com/NB6GC

or contact:
Geoff Abreu K6ERA <gmabreu@sbcglobal.net>
President USS Hornet Amateur Radio Club NB6GC

Presented by K6ST

ARES NEWS

EVENTS CALENDAR

EVENT 2022	DATE	DATE END	SPONSOR/ORGANIZER	COORDINATOR	CONTACT
Silver State 50/50 race	5/21/22		Silver State Striders	Steve KS6A	ks6a@sbcglobal.net
Stetina Paydirt	5/22/22		John Prouty; Bike Monkey	Bob Miller WA6MTY	wa6mty@gbis.com
Truckee Dirt Fondo Bike Ride	6/11/22		John Prouty; Bike Monkey	Bob Miller WA6MTY	wa6mty@gbis.com
Indian Valley Century Bicycle Ride	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
America's Most Beautiful Bike Ride	6/5/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Pony Express Re-Ride	6/6/2022	6/16/22	SIERA	Jeff Cauhape K7BCV	j_cauhape@yahoo.com
Alta Alpina Challenge	6/25/22		Alta Alpina Cycling Club	Jennie Hamiter, KE7YBA	jenniehamiter@mac.com
Running With the Bears	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Bear Growl Gravel Grinder	TBD		Plumas ARC	KJ6CUG	dltrotter@sbcglobal.net
Lost and Found Gravel Grinder SBTS	6/22/22		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Death Ride	7/16/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Tahoe Rim Trail	7/15/22	7/17/22	Tahoe Mountain Milers	Bob Miller WA6MTY	wa6mty@gbis.com
Trailblazer Challenge (two events)	TBD		Make-A-Wish Foundation	Bob Miller WA6MTY	wa6mty@gbis.com
Vegas to Reno Off Road Race	9/10/22	9/12/22	Best in the Desert Racing Assn	Keith KC7HTK	kc7htkeith@hotmail.com
Tour De Tahoe	9/11/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Reno Air-Races	9/14/22	9/18/22	WC-ARES	Bob Miller WA6MTY	wa6mty@gbis.com
Grinduro SBTS	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Nevada Day Parade	10/29/22		NV AREA NW DEC	John Abrott KD7NHC	jabrott77@gmail.com, cell 775 790-1739.
Sparks Turkey Trot	11/24/22		WC-ARES	Bob Miller WA6MTY	wa6mty@gbis.com

July 1, 2022, ARRL releases the New Technician book so anyone studying for the Technician test MUST pass the test before then or they will have to buy a new book.

I have two Ham Crams (test review) before the new Test is released, February 19th and June 18th.

Anyone who is currently studying MUST register on **www.snars.org/oneday** for the review and to take the test.

No Walk-Ins.

Bob WA6MTY
Wa6mty@gbis.com

HAM RADIO NIGHT

3rd Monday of each month at 7PM PT on Zoom
Join together and Elmer each other for Ham Radio Night on **, 2022, 7PM**

The topic smaller breakout groups will be: CONTESTING, ANALOG VHF/UHF, DMR/FUSION, DIY PROJECTS

Each participant can move themselves around to different breakout topics in zoom conferencing to enjoy.

If you have any questions or would like to be of service as an Elmer, please contact K6ST Barry **k6st@arrl.net**

Register below for our next Ham Radio Tech Night, SNARS (virtual on Zoom conferencing) Jan 17, 2022, 7:00PM PST
https://us06web.zoom.us/meeting/register/tZUtduGrqzoiGdHEa40mG24hSbd24SfSfaOH

W7SSB's FUN STUFF

RTTY (Radio Teletype) is the first digital mode that amateur radio operators have used . Question when was RTTY invented ?
Henry Rogers WA7YBS has created the best information page regarding the history and equipment used with RTTY.
https://www.radioblvd.com/rtty_teletype.htm

In **1946**, the VHF Teletype Society was formed in Woodside, NY, with the first known amateur RTTY QSO between W1AUF and W2BFD in May of that year. AFSK modulation using "make and break" keying was used because FSK was not yet authorized by the FCC However with the arrival of computers and their greater level of flexibility and sophistication, other more efficient types of digimode are available but despite this, **the amateur RTTY is still widely used**.

Next Step - PSK31 is a digital communications mode which is intended for live keyboard -to - keyboard conversations, similar to radioteletype . Its data rate is 31.25 bauds. Please review the history of PSK31 on this ARRL link,
http://www.arrl.org/psk31-has-rtty-s-replacement-arrived

When RTTY and PSK31 hit the airways, we had people that said those modes are not real amateur radio just like now with the new digital modes like JT65 and FT8, etc. There are several companies with multi mode controllers such as MFJ,AEA, Timewave and more.

Digital Audio

Ham radio digital voice concepts

Whatever the digital mode that is used, there are several basic concepts that are common to all types, whether used for amateur radio or form commercial or other applications.

Audio enters the transmitter in the normal way from a microphone and is amplified. It is then passed to an analogue to digital converter and as the name suggests it converts the signal to a digital form.

The resulting digital data is then compressed and encoded in a particular format by an item known as a Codec.

Once in the right format the digital data from the codec is fitted into the system data format and then modulated onto the signal.

Obviously the receiver is the reverse of the transmitter so that the incoming signal is demodulated, and data removed from the transmitted signal structure, passed through a codec, and then through a digital to analogue converter to reconstitute the audio.

Digital voice modes have the advantage that they provide excellent signal to noise ratio even in the presence of interference, and they can sometimes be copied at much lower levels than an equivalent analogue system.

One of the characteristics of digital systems is that they can operate down to low signal levels and then suddenly disappear. They move from 100% copy to nothing for a small signal change. This is rather different to analogue systems where there is a gradual degradation in performance.

Digital audio has been used with UHF and VHF systems for years ! Now in the HF segment of amateur bands you will find more hams using digital audio. It is the future for voice communications ….
https://www.kb6nu.com/will-digital-voice-on-hf-ever-be-a-thing/.

The ATS-25 is a touch screen shortwave radio from China (where else ?) that is a fun radio with good audio with a built in speaker . I bought one at the Lincoln Hamfest last year on a whim . Works well and on FM sounds VG . Lots of ebay listings around $100 - $130 .
ATS-25 Si4732 Full-Band Radio Receiver DSP Receiver FM LW (MW And SW) And SSB With 2.4" Touch Screen

Product parameters:
- Shell material: aluminum alloy
- Built-in lithium battery 3.7v /2000MA
- TYPE-C charging interface, maximum 1.5A charging current
- Support TYPE-C interface upgrade program
- Support 3.5MM stereo audio output
- Antenna interface BNC
- Support 3.5MM audio jack FM antenna
- Screen 2.4-inch touch screen
- Output audio power 1.5W
- Shell size: 120*115*48mm (without the sizes of protruding parts)

Frequency Range:
- FM: 64-108MHZ/RDS function
- LW: 153-500KHZ
- MW: 520-1710KHZ
- SW: 1730-30000KHZ
- SSB: 1730-30000KHZ

Features:
1. Support 2.4-inch touch screen function
2. Support broadcast search
3. Support the numeric keyboard to directly input the frequency
4. Support HAM band shortcut channel
5. Support AM bandwidth: 1-6K
6. Support SSB bandwidth: 0.5-4.0K

https://www.aliexpress.com/item/1005002964605509.html

Here is a picture of a real " Ham Radio " !

73's and stay tuned !
Don W7SSB

FUN STUFF FOR FEBRUARY

February has four State QSO parties (VT, MN, NC, and SC) and one Canadian Province party (BC), and four ARRL or NCJ contests, shown in BOLD. Many states show up in OUR QSO party, so we should do likewise! Have fun!

5 Feb 0000 to 6 Feb 2359 1.8-UHF Vermont QSO Party CW Ph Dig
www.ranv.org/vtqso.html

5 Feb 1400 to 5 Feb 2359 1.8-28 Minnesota QSO Party CW Ph Dig
www.w0aa.org/mnqp-rules

5 Feb 1600 to 6 Feb 2359 1.8-28 British Columbia QSO Party CW Ph
www.orcadxcc.org/bcqp_rules.html

5 Feb 2300 to 6 Feb 0300 3.5-14 North American Sprint, CW
www.ncjweb.com

6 Feb 1400 to 9 Feb 0800 1.8-144 Classic Exchange, CW
www.classicexchange.org

12 Feb 0000 to 13 Feb 2359 3.5-28 CQ WW RTTY WPX Contest
www.cqwpxrtty.com/rules.htm

14 Feb 1300 to 18 Feb 2359 All (no WARC) ARRL School Club Roundup CW Ph Dig www.arrl.org/school-club-roundup

19 Feb 0000 to 20 Feb 2359 1.8-28 ARRL International DX Contest, CW www.arrl.org/arrl-dx

25 Feb 2200 to 27 Feb 2200 1.8 CQ 160-Meter Contest, SSB
www.cq160.com/rules.htm

26 Feb 1500 to 27 Feb 0159 1.8-50 South Carolina QSO Party CW Ph Dig **www.scqso.com**

26 Feb 1800 to 27 Feb 0559 3.5-28 North American QSO Party, RTTY www.ncjweb.com

27 Feb 1500 to 28 Feb 0100 3.5-144 North Carolina QSO Party CW Ph Dig" **www.ncqsoparty.org/rules**

Check out the rest here:
http://www.arrl.org/files/file/Contest%20Corral/2022/February%202022%20Corral%20v2.pdf

If you're not into contests, there's always DX to chase! Africa is on tap for Feb going into March!

Jan 01	to Feb 22	**Senegal**	**6W7**
Feb 01	to Feb 10	**Surinam**	**PZ5KV**
Feb 03	to Feb 20	**Zimbabwe**	**Z2**
Feb 04	to Feb 13	**Ivory Coast**	**TU5PCT**
Feb 05	to Feb 25	**Mauritius**	**3B8GY**
Feb 06	to Feb 28	**Senegal**	**6W**
Feb 08	to Feb 15	**Maldives**	**8Q7AH**
Feb 12	to Feb 15	**Ogasawara**	**JD1**
Feb 12	to Mar 08	**Maldives**	**8Q**

Check https://www.ng3k.com/Misc/adxo.html for updates on DXpeditions to make sure they're still a go and see other listings!

RENO QRP SLOW SPEED CW NET

NEXT NET SESSIONS (two of them) WILL BE Feb 3 and Feb 17 at 11 AM PST. Target frequency 7.045 MHz, if busy search somewhere near that frequency.

THE FOLLOWING SHOULD ALWAYS BE IN YOUR REPORT:
NAME ,RST, LOCATION, RIG, POWER, ANTENNA.
REMEMBER TO INCLUDE RST IN YOUR REPORT
Feel free to add something else in your exchange.
Take some time to report RST for other OP's or anything else that comes to mind.
Sharing information about you and your equipment will accomplish two things.

First It gives you and everybody else practice sending and copying.
Second It is nice to spend time on the air with your friends. Consider this a QRP meeting on the air.

Relax and have some airtime fun with your friends.
73/72 Ed/WD7Y

NAME THAT RIG **(from page 6)**

Okay, it's not REALLY ham radio, but the **Zenith Transoceanic** series of portable (?!?) radios got many a future ham interested in all the goings-on on the ham bands! The model shown here is the **Zenith Transoceanic G500,** circa 1949. The first Transoceanic (or "**T/O**" to the groupies) was built in 1941, the last in 1981. **T/Os** covered the BC band and several short wave bands, and once the transistorized models came out, they also covered the FM band. Most models were obviously tube radios, but a solid state **T/O** was introduced in 1957. The last tube model was sold in 1962**. Zenith T/Os** (especially the early tube models) are VERY collectible, representing the pinnacle of casual shortwave listening in their day. A **T/O**, particularly one in a leather case, looked cool in your 1950s living room! Most tube models came with Zenith's patented "**Wave Magnet**" antenna, a detachable loop on a cardboard form that could be put most anywhere for good reception. The first **T/Os,** the 7G and 8G series, used 8 octal series 1 volt filament tubes, most afterwards used either 5 or 6 miniature tubes. The **T/O** even went to war in Korea as the R-520/URR, a model H500, and again in the late 50s as the R520A/URR, a model Y600. Most probably sat in some General's tent. **T/Os,** except for the transistorized models were battery or AC powered, using "A" (filament) and "B" (B+) batteries, now obsolete, but some D cells and a stack of 9V batteries work as well. Total production of **T/Os** was over a million. Yours truly had an H500 (vintage 1953) briefly in the mid 80s, wish I still had it now.

The First T/O, 1941

The First Transistorized T/O 1957

Board of Directors Meeting Minutes

January 12, 2022 - 6:00PM

At Chin Chin plus Zoom

1. Call to order and roll call at 6:00 PM

Board of Directors:

Anthony Marcin, W7XM	P	Barry Bettman, K6ST	P	John Miller, N7JDM	P
Bill Jones, AE7OX	P	John Byerly, N7ROJ	P	Wes Vick, KG7QXE	P
Jim Shepherd, W6US	P	Doug Edmondo, W7DBE (Scribe)	P		

AGuest(s) In attendance:

BLee Edwards, KE7KPY

2. Approval of Minutes - Discussion/Action

AThe December 2021 meeting minutes were approved

3. Approval of Agenda - Discussion/Action

AThe Agenda was approved

4. Reports

A. President's Report – Two UHF and Two VHF repeaters have arrived, Bill Jones has them.

B. Secretary Report – 475 members, cleaned up rolls and will remind folks who haven't renewed. All State Filing is complete (New officers)

C. Treasurer – December 2021 End of Month, Operating: $10,478, Savings: $17,769, Self Insurance: $13,510, Paypal: $1,270, Con vention: $4,212. Net Monthly $357, net YTD: $11,922. Memberships 19, Donations year to date $ (Amazon $228, Members $6,779, Paypal $86)

Notes:

Moved $1,000 from PayPal to Operating
Moved $190 from Operating to Self-Insurance
Moved $95 from Operating to Savings
Moved $10,000 from Savings to Operating account to cover repeater purchase of $9,696
Working on 2022 budget for next month.

D. Technical Team – Pat

Repeater Upgrade – The new repeaters will be programmed and aligned by Sierra once we provide IP data to them. Will be installed when the sites are available with the links being first in line for V.P. and Toulon. Noted that the Lobdell link to Rose would be fixed in July.

E. Control Operators / Trustee

No Report

F. Events

Field Day – Jim reserved the main site for 50 people, no real changes from last year with respect to any park rules and regulations.

G. Education & Youth Activities

1. The Hornet presentation was well received. At Barry's request, the board motioned and approved a $250 donation to the Hornet Amateur Radio Club.
2. Not much going at UNR, Barry will still promote the school club round up.
3. Barry asked about the potential for grant money – Tony updated the board on what's available, need a committee put together

H. Noon Net - Noon Net Manager, No issues, one potential new Net Control Operator, KJ7BKW

5. Old Business

None

6. New Business

A. Forest Service Fees – ARRL is aware of the issue which is that a $1,400 surcharge will be assessed for sites on Forest Service / BLM land. Jim, W6US provided some insights and noted that members should send individual letters. Hints for member letters will be sent in a mini-static. We do not want a form letter.

B. HAM Swap, Aiming for May 21st at 8am. Will do a raffle again. Barry and Wes will check with Cabella's.

7. Board member and Public Comments

A. John B. - No further comments
B. Wes V. - Discussed member reports of repeater issues – Board noted that issues should be reported on the main telegram chat page or via SNARS.org E-mail.
C. Jim S. - Nothing Further
D. Bill J. - Mentioned the billing information for site billing, John B. took action to ask Pat.
E. Barry – Looks for contests and other good things for the club, John M. trying for AVR industry contact to speak at February's meeting.
Would like to have repeater status on the Webpage
F. Tony – Updated the Website with repeater status. Looking for help with a grant committee – need some volunteers from the club to assist.
G. Lee – No comments
H. Doug – Looking forward to a new year of activities

8. Adjournment - Action

A. Next Meeting: February 9th, 2022. Location Chin Chin plus Zoom
B. Meeting adjourned at 1905